

UNIVERSITY OF QUEENSLAND

Prentice Computer Centre

NEWSLETTER

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1 CONTENTS OF THIS ISSUE

2. FILE MIGRATION SYSTEM
3. MONITOR - IMPROVEMENTS TO DYNAMIC LINE ALLOCATION
4. PRINT REQUESTS
5. MONECS
6. DELETION OF SUPERSEDED SOFTWARE
7. FORTRAN LOGICAL UNIT DEFAULTS
8. FILE ACCESS IN FORTRAN
9. LINK V3A OVERLAYS
10. NEW RELEASE OF SIMULA
11. PRINTING DATA FILES
12. CENTRE TELEPHONE NUMBERS
13. A SENTIMENTAL STORY

2 FILE MIGRATION SYSTEM

The File Migration System has recently been overhauled and extended. Error handling and recovery have been improved. Facilities added include:

- immediate archival of files to get below quota on logout.
- full range of file specifications for offline directory examination.
- offline directory printout can be terminated by ↑C.
- offline directory may be sent to a disk file.
- multiple commands for the same file may be given.

For further information print - HLP:FMS.HLP.

### 3 MONITOR - IMPROVEMENTS TO DYNAMIC LINE ALLOCATION

A new version of Dynamic Line Allocation is currently being tested and will shortly be implemented in the production Monitor.

Users will notice little change, but the following points should be noted:

- (i) The software line number of a TTY will be the same as the hardware line number.
- (ii) It will not be necessary to type ↑C to get a line.
- (iii) Certain terminal characteristics (e.g. filler class) will be set up as soon as a line is obtained.
- (iv) There is no need for ALCTTY or TESTAT.
- (v) The UUO's MSTAB\$, RSTAB\$ will give non-skip returns.

### 4 PRINT REQUESTS

No more than 14 files should be included in any print request queued to a remote batch station. If more than 14 files are in the request it will be requeued to the central station and under some circumstances a portion of the request will be lost.

### 5 MONECS

Users of MONECS should note that a descriptive file exists as DOC:MONECS.DOC.

Copies of this file are available on request at all service areas or may be printed with the command

.PRINT LPTS2:=DOC:MONECS.DOC

This file will in due course be printed in manual form but, in the meantime, we ask your indulgence for the subtefuges adopted for ±, ≤ etc.

## 6 DELETION OF SUPERSEDED SOFTWARE

The following items of software, which have been on OLD: for a significant period and are superseded by versions on STD:, have been deleted:

F10 V4  
LIBRARY V3  
LINED 20B.

On Monday, 28 March 1977, the following old versions of ALGOL operating systems will be transferred to OLD: and will be deleted approximately a month later: V3, V4 and V6.

It will be possible to continue using these versions with the following procedure:

.R SETSRC  
\*SYS  
+C  
.AS OLD:SYS

However, any user of these old versions is recommended to recompile his program to use the standard version.

## 7 FORTRAN LOGICAL UNIT DEFAULTS

In early 1976 (N-200) a proposal was made for an alternative scheme for default allocation of devices to Fortran Logical Units in Forots and a version including these defaults was implemented on NEW:. Informal discussion and usage experience indicated that conversion to this scheme could cause significant problems and we do not propose to proceed with this alternative scheme.

As from 28 March 1977, a new version of Forots is to be installed on NEW which will include our current standard Fortran Logical Unit defaults - namely

- All defaults to be as per standard DECsystem10 documentation except
  - LU6 defaults to TTY: not PTR:
  - LU8 defaults to DTAØ:
  - LU10-14 default to DSK: not DTAn:

This version of Forots is 4B(41460)-3.

## 8 FILE ACCESS IN FORTRAN

In a Fortran program, it is frequently necessary to establish a relationship between a Fortran Logical Unit and a file. Commonly the utility functions IFILE and OFILE or the verb OPEN are used, e.g.

```
CALL IFILE(FLU,'filename')  
WHICH IS EQUIVALENT TO  
OPEN(UNIT=FLU,DEVICE='DSK',file='filename',ACCESS='SEQIN')
```

or

```
CALL OFILE(FLU,'filename')  
WHICH IS EQUIVALENT TO  
OPEN(UNIT=FLU,DEVICE='DSK',file='filename',ACCESS='SEQOUT')
```

It has been found that the IFILE/OFILE calls can result in substantially more overhead data transfers.

It is recommended that the OPEN statement be used.

## 9 LINK V3A OVERLAYS

The version of LINK announced in the last newsletter (N-211) has been replaced by a version which supports the overlay scheme as outlined in the Link reference manual. As this is a new product in this installation, it may be that users (and we ourselves) will encounter some teething problems with it. Please contact our consultation service if you are having problems.

It should be noted that the plot facility for overlay 'trees' is not likely to work because of our modifications to plotting software. However, it should still be possible to produce such a plot on the Line Printer.

## 10 NEW RELEASE OF SIMULA

SIMULA release 3 is now available on NEW:. Users desiring to test it should set NEW into their search list

- (i) at login by LOG pj,pg /NEW
- (ii) or by the SETSRC program

```
.R SETSRC  
*NEW  
*+C
```

SIMULA is a general purpose high-level programming language comparable in power to Algol-68 or PL/1. Simula contains Algol-60 as a subset, with additions for program and data structuring, list, set and queue handling, text-string handling, direct-access I/O, quasi-parallel processes and simulation.

SIMULA is available on computers from DEC, CDC, Univac, IBM and CII. Translator programs are available to cope with the differences in the hardware representation of Simula programs on computers with different character sets.

SIMULA on the DECsystem10 includes a debugging system SIMDDT which is loaded after an execution error thus helping the user to locate the source of the error. SIMDDT may also be loaded before execution of the SIMULA program.

SPRINT and COMPIL have been modified to know about SIMULA. Thus a  
\$SIMULA card

in batch indicates a SIMULA compilation is required. Similarly, the monitor commands

COMPILE, LOAD, EXECUTE and DEBUG

force a simula compilation if required and the extension of file specified is .SIM. e.g. if the file TEST.SIM exists on the user's area but TEST.REL does not, the command - DEBUG TEST will compile TEST.SIM with the SIMULA compiler, load TEST.REL into memory, cause SIMDDT to be loaded and start SIMDDT.

Documentation for the SIMULA system exists in the files

- |       |                 |  |
|-------|-----------------|--|
| (i)   | DOCH:SIMLH1.MAN | a general machine independent description of SIMULA                            |
| (ii)  | DOCH:SIMLH2.MAN | a description of the DECsystem10 implementation of SIMULA                      |
| (iii) | DOCH:SIMLH3.MAN | a description of the large number of utility procedures in the SIMULA library. |

Since these files are quite large (1500 blocks total), their life in the online storage area will be limited, after which they may be available on request.

## 11 PRINTING DATA FILES

Often users desiring to print files with a .DAT extension forget that such files are normally regarded as being Fortran produced files with Fortran carriage control characters. Thus lines with a 1 in column 1 will cause the printer to slew to the top of a new page. This is a waste of paper and an extra cost and inconvenience to the user. The problem is avoided by using the "/FILE:ASCII" switch, e.g.

```
PRINT LPTS2:=TEST.DAT/FILE:ASCII
```

If a list of files is to be specified the switch may be specified before the first file specification so that it becomes "sticky" and applies to all subsequent file specifications unless overridden by another sticky switch or a "local" switch (one appearing after the file specification). Note that in the command

```
.PRINT /FILE:ASCII LPTS2:=file1,file2
```

the switch is not sticky because it appears to the left of the =. Generally system programs clear defaults before scanning the right hand side of an = character. Thus the correct command is:

```
PRINT LPTS2:=/FILE:ASCII file1,file2
```

## 12 CENTRE TELEPHONE NUMBERS

With the move of most activities to the new service areas, users should note some changed telephone numbers.

Booking of Disk Drives	Extension 6015
Booking of Acoustic Terminals	Extension 6018
Accounting & general enquiries	Extension 188
Duty programmer (when scheduled)	Extension 6025
Availability of computer output	Extension 6024

## 13 A SENTIMENTAL STORY

In going through our records, we find we have singularly few photographs of our early days. If any users have any photographs, particularly of human interest, we would be pleased to borrow them and take copies for our archives.

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